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1. (Four times amended) A method of producing plant progeny as seeds and optionally as plants which shows herbicide resistance, to a herbicide said method comprising:

El (i) applying said herbicide to a population of progenitor plants, at least some of said progenitor plants being heterozygous (Rr) wherein the R is the herbicide resistant gene and the r is not evidencing the herbicide resistant such application being at least after the V5 stage which is an advanced vegetative state before flowering; wherein the applied herbicide effectively inhibits pollen production which does not carry the herbicide resistant gene (R) whereby the resultant pollen is preferentially carrying the herbicide resistant gene (R); such that resultant pollen from said plants fertilize the female plants which are selected from a group consisting of plants which are: homozygous (RR), heterozygous (Rr) for the Glyphosate resistance gene wherein the plant is resistant to the herbicide, susceptible to the herbicide (rr), and a mixture of two or more to these (RR), (Rr), (rr) types of plants;

(ii) obtaining preferentially herbicide resistant plant progeny wherein the plant progeny is carrying the herbicide resistance gene (RR) or (Rr) therefrom as seeds and optionally as plants.

2. (once amended) The method according to claim 1 wherein the herbicide resistant plants are glyphosate resistant, and the herbicide applied in step (i) is glyphosate.

3. (once amended) The method according to claim 1 wherein the plants comprise crop plants.